

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **01284583 A**

(43) Date of publication of application: **15.11.89**

(51) Int. Cl.

C09K 11/08
C01G 9/08
H05B 33/14

(21) Application number: **63113499**

(22) Date of filing: **12.05.88**

(71) Applicant: **MITSUBISHI METAL CORP**

(72) Inventor: **NISHIHARA AKIRA**
SAKAI YOICHI
YOSHIZUMI MOTOHIKO

(54) **EL PHOSPHOR BASED ON DISPERSED ZNS**

(57) Abstract:

PURPOSE: To obtain the title phosphor used for an electroluminescent element consisting of a transparent conductive layer, a luminescent layer, and a back electrode, exhibiting excellent luminance and life, by covering a part of the surface of a ZnS phosphor particle with a metal oxide.

CONSTITUTION: ZnS is mixed with Cu, Mn, Al, Mg, etc., as activator and Cl, Br, I, etc., as co-activator. This

mixture is baked in an atmosphere of H_2S to give ZnS phosphor particles, which are treated with an alkoxide of Ti, Al, Si or Zr and hydrolyzed to cover a part of the surface thereof with a metal oxide, such as TiO_2 , Al_2O_3 , SiO_2 or ZrO_2 , in such an amount that the intensity of the Zn element of the ZnS phosphor, determined by X-ray photoelectron spectroscopy, is 30-90% of that of the Zn element of an uncovered ZnS phosphor.

COPYRIGHT: (C)1989,JPO&Japio